IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims in this application.

The text of all pending claims (including any withdrawn claims) is set forth below. Canceled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

Please AMEND claims 1-11, 27-31, 36, and 37 and ADD new claims 38-52 in accordance with the following:

1. (Currently amended) An information storage medium for use with a recording and/or reproducing apparatus, the information storage medium comprising:

a user data area comprising a plurality of user data ~~and first~~ frames, each of the user data frames comprising corresponding sync data of a plurality of sync ~~patterns~~ data; and

an additional data area located before and/or after the user data area, and comprising at least two additional data frames, a first one of the additional data frames comprising first sync data, and a second one of the additional data frames comprising second sync ~~patterns that are~~ data, the first sync data and the second sync data being different from the ~~first~~ plurality of sync ~~patterns and that enable~~ data of the user data frames, the first sync data and the second sync data enabling the apparatus to ~~distinguish~~ identify the additional data area from the user data area when the information storage medium is used with the apparatus;

wherein:

~~the second sync patterns comprise:~~

~~a third~~ the first sync ~~pattern comprising~~ data comprises a ~~third~~ first sync body and a ~~third~~ first sync identification, ~~and~~

~~a fourth~~ the second sync ~~pattern comprising~~ data comprises a ~~fourth~~ second sync body and a ~~fourth~~ second sync identification,

the ~~third~~ first sync identification is different from the ~~fourth~~ second sync identification,

the information storage medium is a read-only information storage medium, and

the additional data area ~~is provided to make~~ makes the read-only information storage medium compatible with a recordable information storage medium.

2. (Currently amended) The information storage medium of claim 1, wherein the plurality of sync data of the user data frames, the first sync ~~patterns~~ data, and/or the second sync ~~patterns~~ data are disposed in a plurality of locations, and are arranged so that adjacent ones of the plurality of sync data of the user data frames, the first sync ~~patterns~~ data, and/or the second sync ~~patterns~~ data are separated by equal intervals.

3. (Currently amended) The information storage medium of claim 2, wherein the first sync data and/or the second sync ~~patterns~~ data are arranged in a plurality of locations in the additional data area so that a size of each of ~~a plurality of~~ the user data ~~recorded in~~ frames of the user data area ~~and~~ separated by the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames is equal to a size of each of ~~a plurality of~~ the at least two additional data ~~recorded in~~ frames of the additional data area ~~and~~ separated by the first sync data and/or the second sync ~~patterns~~ data.

4. (Currently amended) The information storage medium of claim 3, wherein:

each of the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames comprises a ~~first~~ sync body and a ~~first~~ sync identification, and

each of the ~~first~~ sync identification of each of the plurality of sync data of the user data frames, the ~~third~~ first sync identification, and the ~~fourth~~ second sync identification satisfies a run-length limited (RLL) (d, k) code having a minimum constraint of d and a maximum constraint of k.

5. (Currently amended) The information storage medium of claim 3, wherein:

the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames are arranged in a plurality of locations in the user data area, and

a total size of the at least two additional data ~~recorded in~~ frames of the additional data area is an integer multiple of a size of each of ~~a plurality of~~ the user data ~~recorded in~~ frames of the user data area ~~and~~ separated by the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames.

6. (Currently amended) The information storage medium of claim 2, wherein the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames are arranged in a plurality of locations in the user data area, and

a total size of the at least two additional data ~~recorded in~~ frames of the additional data area is an integer multiple of a size of each of ~~a plurality of~~ the user data ~~recorded in~~ frames of the user data area ~~and~~ separated by the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames.

7. (Currently amended) The information storage medium of claim 6, wherein:

each of the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames comprises a ~~first~~ sync body and a ~~first~~ sync identification, and

each of the ~~first~~ sync identification of each of the plurality of sync data of the user data frames, the ~~third~~ first sync identification, and the ~~fourth~~ second sync identification satisfies a run-length limited (RLL) (d, k) code having a minimum constraint of d and a maximum constraint of k.

8. (Currently amended) The information storage medium of claim 2, wherein:

each of the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames comprises a ~~first~~ sync body and a ~~first~~ sync identification, and

each of the ~~first~~ sync identification of each of the plurality of sync data of the user data frames, the ~~third~~ first sync identification, and the ~~fourth~~ second sync identification satisfies a run-length limited (RLL) (d, k) code having a minimum constraint of d and a maximum constraint of k.

9. (Currently amended) The information storage medium of claim 1, wherein the first sync data and/or the second sync ~~patterns~~ data are arranged in a plurality of locations in the additional data area so that a size of each of ~~a plurality of~~ the user data ~~recorded in~~ frames of the user data area ~~and~~ separated by the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames is equal to a size of each of ~~a plurality of~~ the at least two additional data ~~recorded in~~ frames of the additional data area ~~and~~ separated by the first sync data and/or the second sync ~~patterns~~ data.

10. (Currently amended) The information storage medium of claim 1, wherein the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames are disposed in a plurality of locations in the user data area, and

a total size of the at least two additional data ~~recorded in~~ frames of the additional data area is an integer multiple of a size of each of ~~a plurality of~~ the user data ~~recorded in~~ frames of the user data area ~~and~~ separated by the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames.

11. (Currently amended) The information storage medium of claim 1, wherein:

each of the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames comprises a ~~first~~ sync body and a ~~first~~ sync identification, and

each of the ~~first~~ sync identification of each of the plurality of sync data of the user data frames, the ~~third~~ first sync identification, and the ~~fourth~~ second sync identification satisfies a run-length limited (RLL) (d, k) code having a minimum constraint of d and a maximum constraint of k.

12–26. (Canceled)

27. (Currently amended) A recording and/or reproducing apparatus for use with an information storage medium, the information storage medium comprising a user data area comprising ~~first~~ a plurality of user data frames, each of the user data frames comprising corresponding data of a plurality of sync ~~patterns~~ data, ~~and~~ the information storage medium further comprising an additional data area located before and/or after the user data area, ~~and~~ the additional data area comprising at least two additional data frames, a first one of the additional data frames comprising first sync data, and a second one of the additional data frames comprising second sync ~~patterns that are~~ data, the first sync data and the second sync data being different from the ~~first~~ plurality of sync ~~patterns and that enable~~ data of the user data frames, the first sync data and the second sync data enabling the apparatus to ~~distinguish~~ identify the additional data area from the user data area when the information storage medium is used with the apparatus, the apparatus comprising:

a recording and/or reproducing unit to optically transfer user data and/or additional data between the apparatus and the information storage medium; and

a controller to control the recording and/or reproducing unit to transfer the user data with respect to the user data area, and to transfer the additional data with respect to the additional data area;

wherein:

~~the second patterns comprise:~~

~~a third~~ the first sync ~~pattern comprising~~ data comprises a ~~third~~ first sync body and a ~~third~~ first sync identification, and

~~a fourth~~ the second sync ~~pattern comprising~~ data comprises a ~~fourth~~ second sync body and a ~~fourth~~ second sync identification,

the ~~third~~ first sync identification is different from the ~~fourth~~ second sync identification,

the information storage medium is a read-only information storage medium, and

the additional data area ~~is provided to make~~ makes the read-only information storage medium compatible with a recordable information storage medium.

28. (Currently amended) The recording and/or reproducing apparatus of claim 27, wherein:

the controller controls the recording and/or reproducing unit to determine the user data area of the information storage medium,

the ~~first~~ plurality of sync ~~patterns~~ data of the ~~information storage medium~~ user data frames are disposed in a plurality of locations in the user data area so as to define a size of each of ~~a plurality of~~ the user data ~~recorded in~~ frames of the user data area ~~and~~ separated by the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames,

the first sync data and/or the second sync ~~patterns of the information storage medium~~ data are disposed in a plurality of locations in the additional data area so as to define a size of each of ~~a plurality of~~ the at least two additional data ~~recorded in~~ frames of the additional data area ~~and~~ separated by the first sync data and/or the second sync ~~patterns~~ data, and

the size of each of the ~~plurality of the~~ user data ~~recorded in~~ frames of the user data area is equal to the size of each of ~~the plurality of~~ the at least two additional data ~~recorded in~~ frames of the additional data area.

29. (Currently amended) The recording and/or reproducing apparatus of claim 27, wherein the controller further controls the recording and/or reproducing unit to:

determine another user data area comprising ~~first~~ a plurality of user data frames, each of the user data frames comprising corresponding data of a plurality of sync ~~patterns~~ data, so that the additional data area is disposed between the user data area and the other user data area, and

transfer the user data with respect to the other user data area.

30. (Currently amended) The recording and/or reproducing apparatus of claim 27, wherein:

each of the ~~first~~ plurality of sync ~~patterns~~ data of the user data frames comprises a sync body and a ~~first~~ sync identification;

~~that~~ the sync identification of each of the plurality of sync data of the user data frames satisfies a run-length limited (RLL) (d, k) code having a minimum constraint of d and a maximum constraint of k, and

the controller detects the ~~first~~ sync identification of each of the plurality of sync data of the user data frames.

31. (Currently amended) The recording and/or reproducing apparatus of claim 30, wherein:

each of the ~~third~~ first sync identification and the ~~fourth~~ second sync identification satisfies a run-length limited (RLL) (d, k) code having a minimum constraint of d and a maximum constraint of k, and

the controller detects the ~~third~~ first sync identification and the ~~fourth~~ second sync identification.

32–35. (Canceled)

36. (Currently amended) The information storage medium of claim 11, wherein each of the ~~first~~ sync body of each of the plurality of sync data of the user data frames, the ~~third~~ first sync

body, and the ~~fourth~~ second sync body does not satisfy the run-length limited (RLL) (d, k) code having the minimum constraint of d and the maximum constraint of k.

37. (Currently amended) The recording and/or reproducing apparatus of claim 31, wherein each of the ~~first~~ sync body of each of the plurality of sync data of the user data frames, the ~~third~~ first sync body, and the ~~fourth~~ second sync body does not satisfy the run-length limited (RLL) (d, k) code having the minimum constraint of d and the maximum constraint of k.

38. (New) An information storage medium for use with a recording and/or reproducing apparatus, the information storage medium comprising:

an additional data area comprising:

a first additional data frame comprising first sync data; and

a second additional data frame comprising second sync data; and

a data area comprising a data frame comprising third sync data;

wherein:

the first sync data is different from the second sync data;

the third sync data is different from the first sync data and the second sync data to enable the apparatus to identify the additional data area from the data area when the information storage medium is used with the apparatus;

a size of the additional data area is an integer multiple of a size of the data frame; and

the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

39. (New) An information storage medium for use with a recording and/or reproducing apparatus, the information storage medium comprising:

an additional data area comprising:

a first additional data frame comprising first sync data; and

a second additional data frame comprising second sync data; and

a data area comprising a data frame comprising third sync data;

wherein:

the first sync data is different from the second sync data;

the third sync data is different from the first sync data and the second sync data to enable the apparatus to identify the additional data area from the data area when the information storage medium is used with the apparatus;

a size of the first additional data frame is equal to a size of the data frame; and

the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

40. (New) An information storage medium for use with a recording and/or reproducing apparatus, the information storage medium comprising:

an additional data area comprising:

a first additional data frame comprising first sync data; and

a second additional data frame comprising second sync data; and

a data area comprising a data frame comprising third sync data;

wherein:

the first sync data is different from the second sync data;

the third sync data is different from the first sync data and the second sync data to enable the apparatus to identify the additional data area from the data area when the information storage medium is used with the apparatus;

each of the first sync data and the second sync data comprises a sync identification and a sync body;

the sync identification of the first sync data is different from the sync identification of the second sync data; and

the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

41. (New) An information storage medium for use with a recording and/or reproducing apparatus, the information storage medium comprising:

an additional data area comprising:

a first additional data frame comprising first sync data; and

a second additional data frame comprising second sync data; and

a data area comprising a plurality of data frames, each of the data frames comprising corresponding sync data of a plurality of sync data;

wherein:

the first sync data is different from the second sync data;

the plurality of sync data of the data frames is different from the first sync data and the second sync data to enable the apparatus to identify the additional data area from the data area when the information storage medium is used with the apparatus;

each of the first sync data and the second sync data comprises a sync identification and a sync body;

the sync identification of the first sync data is different from the sync identification of the second sync data; and

the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

42. (New) An information storage medium for use with a recording and/or reproducing apparatus, the information storage medium comprising:

a plurality of data areas, each of the plurality of data areas comprising a plurality of data frames, each of the data frames comprising corresponding sync data of a plurality of sync data; and

an additional data area located between two of the data areas and comprising:

a first additional data frame comprising first sync data; and

a second additional data frame comprising second sync data;

wherein:

the first sync data is different from the second sync data;

the first sync data and the second sync data enable the apparatus to identify the additional data area from the data areas when the information storage medium is used with the apparatus;

each of the first sync data and the second sync data comprises a sync identification and a sync body;

the sync identification of the first sync data is different from the sync identification of the second sync data; and

the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

43. (New) A reproducing apparatus for use with an information storage medium, the information storage medium comprising an additional data area comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; the information storage medium further comprising a data area comprising a data frame comprising third sync data; wherein the first sync data is different from the second sync data; the third sync data is different from the first sync data and the second sync data to enable the apparatus to identify the additional data area from the data area when the information storage medium is used with the apparatus; and a size of the additional data area is an integer multiple of a size of the data frame; the apparatus comprising:

a pickup to emit light onto the information storage medium; and

a controller to control the pickup to reproduce data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

44. (New) A reproducing apparatus for use with an information storage medium, the information storage medium comprising an additional data area comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; the information storage medium further comprising a data area comprising a data frame comprising third sync data; wherein the first sync data is different from the second sync data; the third sync data is different from the first sync data and the second sync data to enable the apparatus to identify the additional data area from the data area when the information storage medium is used with the apparatus; and a size of the first additional data frame is equal to a size of the data frame; the apparatus comprising:

a pickup to emit light onto the information storage medium; and

a controller to control the pickup to reproduce data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

45. (New) A reproducing apparatus for use with an information storage medium, the information storage medium comprising an additional data area comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; the information storage medium further comprising a data area comprising a data frame

comprising third sync data; wherein the first sync data is different from the second sync data; the third sync data is different from the first sync data and the second sync data to enable the apparatus to identify the additional data area from the data area when the information storage medium is used with the apparatus; each of the first sync data and the second sync data comprises a sync identification and a sync body; and the sync identification of the first sync data is different from the sync identification of the second sync data; the apparatus comprising:

a pickup to emit light onto the information storage medium; and

a controller to control the pickup to reproduce data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

46. (New) A reproducing apparatus for use with an information storage medium, the information storage medium comprising an additional data area comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; the information storage medium further comprising a data area comprising a plurality of data frames, each of the data frames comprising corresponding sync data of a plurality of sync data; wherein the first sync data is different from the second sync data; the plurality of sync data of the data frames is different from the first sync data and the second sync data to enable the apparatus to identify the additional data area from the data area when the information storage medium is used with the apparatus; each of the first sync data and the second sync data comprises a sync identification and a sync body; and the sync identification of the first sync data is different from the sync identification of the second sync data; the apparatus comprising:

a pickup to emit light onto the information storage medium; and

a controller to control the pickup to reproduce data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

47. (New) A reproducing apparatus for use with an information storage medium, the information storage medium comprising a plurality of data areas, each of the plurality of data areas comprising a plurality of data frames, each of the data frames comprising corresponding sync data of a plurality of sync data; the information storage medium further comprising an additional data area located between two of the data areas and comprising a first additional data

frame comprising first sync data, and a second additional data frame comprising second sync data; wherein the first sync data is different from the second sync data; the first sync data and the second sync data enable the apparatus to identify the additional data area from the data areas when the information storage medium is used with the apparatus; each of the first sync data and the second sync data comprises a sync identification and a sync body; and the sync identification of the first sync data is different from the sync identification of the second sync data; the apparatus comprising:

a pickup to emit light onto the information storage medium; and

a controller to control the pickup to reproduce data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats for use with the apparatus.

48. (New) A method of reproducing information from an information storage medium, the information storage medium comprising an additional data area comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; the information storage medium further comprising a data area comprising a data frame comprising third sync data; wherein the first sync data is different from the second sync data; the third sync data is different from the first sync data and the second sync data to enable the additional data area to be identified from the data area; and a size of the additional data area is an integer multiple of a size of the data frame; the method comprising:

reproducing the first sync data and/or the second sync data; and

reproducing data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats.

49. (New) A method of reproducing information from an information storage medium, the information storage medium comprising an additional data area comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; the information storage medium further comprising a data area comprising a data frame comprising third sync data; wherein the first sync data is different from the second sync data; the third sync data is different from the first sync data and the second sync data to enable

the additional data area to be identified from the data area; and a size of the first additional data frame is equal to a size of the data frame; the method comprising:

reproducing the first sync data and/or the second sync data; and

reproducing data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats.

50. (New) A method of reproducing information from an information storage medium, the information storage medium comprising an additional data area comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; the information storage medium further comprising a data area comprising a data frame comprising third sync data; wherein the first sync data is different from the second sync data; the third sync data is different from the first sync data and the second sync data to enable the additional data area to be identified from the data area; each of the first sync data and the second sync data comprises a sync identification and a sync body; and the sync identification of the first sync data is different from the sync identification of the second sync data; the method comprising:

reproducing the first sync data and/or the second sync data; and

reproducing data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats.

51. (New) A method of reproducing information from an information storage medium, the information storage medium comprising an additional data area comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; the information storage medium further comprising a data area comprising a plurality of data frames, each of the data frames comprising corresponding sync data of a plurality of sync data; wherein the first sync data is different from the second sync data to enable the additional data area to be identified from the data area; the plurality of sync data of the data frames is different from the first sync data and the second sync data; each of the first sync data and the second sync data comprises a sync identification and a sync body; and the sync

identification of the first sync data is different from the sync identification of the second sync data; the method comprising:

reproducing the first sync data and/or the second sync data; and

reproducing data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats.

52. (New) A method of reproducing information from an information storage medium, the information storage medium comprising a plurality of data areas, each of the plurality of data areas comprising a plurality of data frames, each of the data frames comprising corresponding sync data of a plurality of sync data; the information storage medium further comprising an additional data area located two of the data areas and comprising a first additional data frame comprising first sync data, and a second additional data frame comprising second sync data; wherein the first sync data is different from the second sync data; the first sync data and the second sync data enable the additional data area to be identified from the data areas; each of the first sync data and the second sync data comprises a sync identification and a sync body; and the sync identification of the first sync data is different from the sync identification of the second sync data; the method comprising:

reproducing the first sync data and/or the second sync data; and

reproducing data recorded in the data area;

wherein the additional data area provides compatibility among information storage media having different formats.